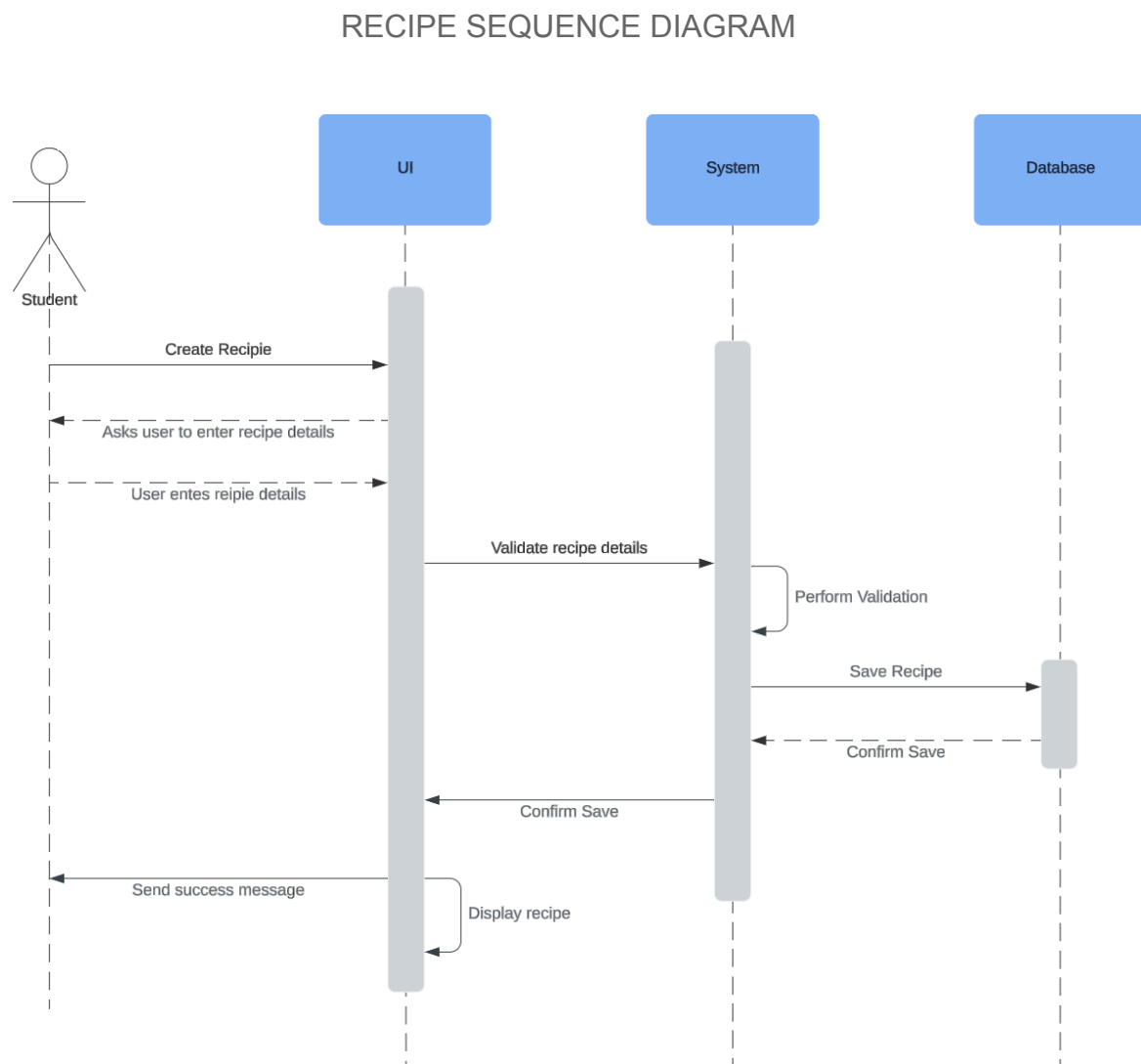| Jayanth Rao	Disha Anil	Soham Roy	Mohammed Basheeruddin	Satya Deep Dasari	Aditi Aatmaja
jr6594	da3671	sr7415	mb9885	gd2576	aa12918

UML DIAGRAMS

Use Case Diagram:

The use case diagrams capture the high-level interactions for the project's major functionalities. For example, key interactions such as user authentication (login, logout), recipe management (create, edit, delete), grocery marketplace (buy/sell groceries), and meal planning are clearly represented. These diagrams help ensure all user roles (e.g., students, admins) and their interactions with the platform are understood and covered, supporting goals like budget-friendly meal management and community engagement
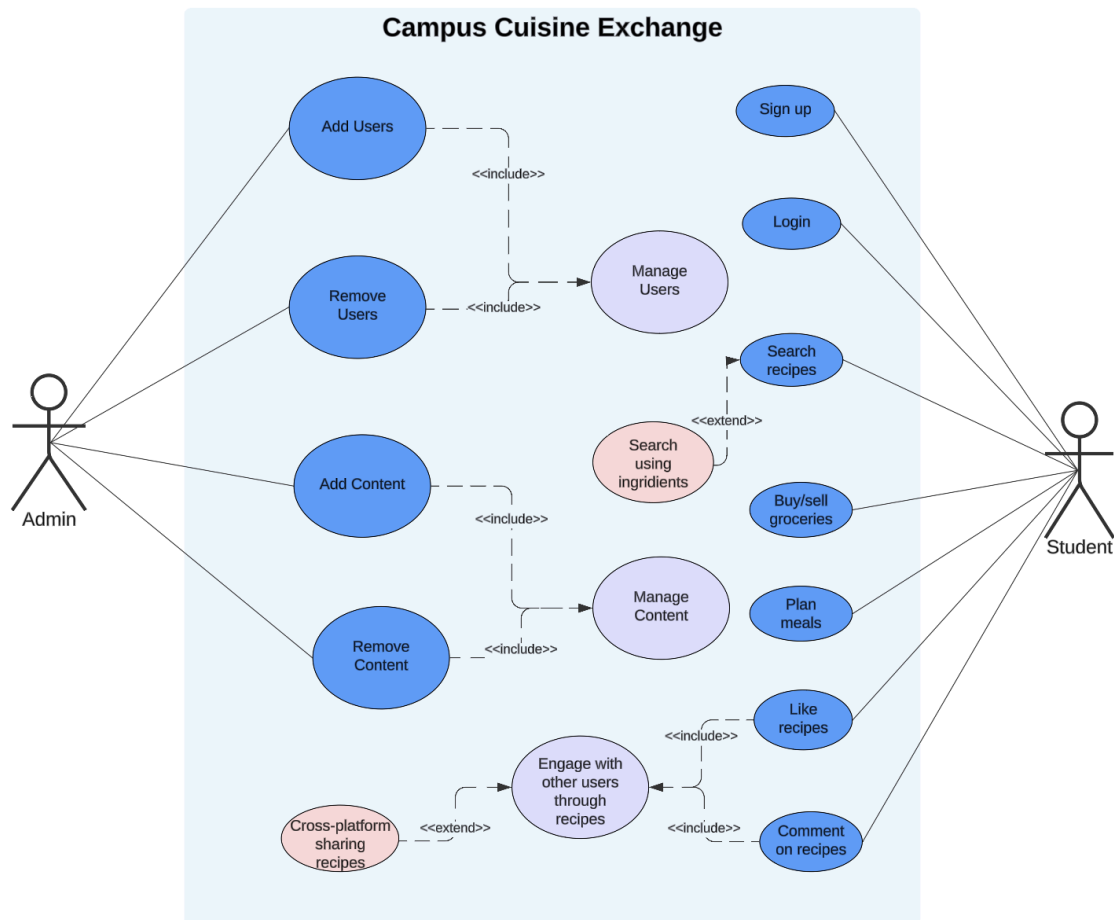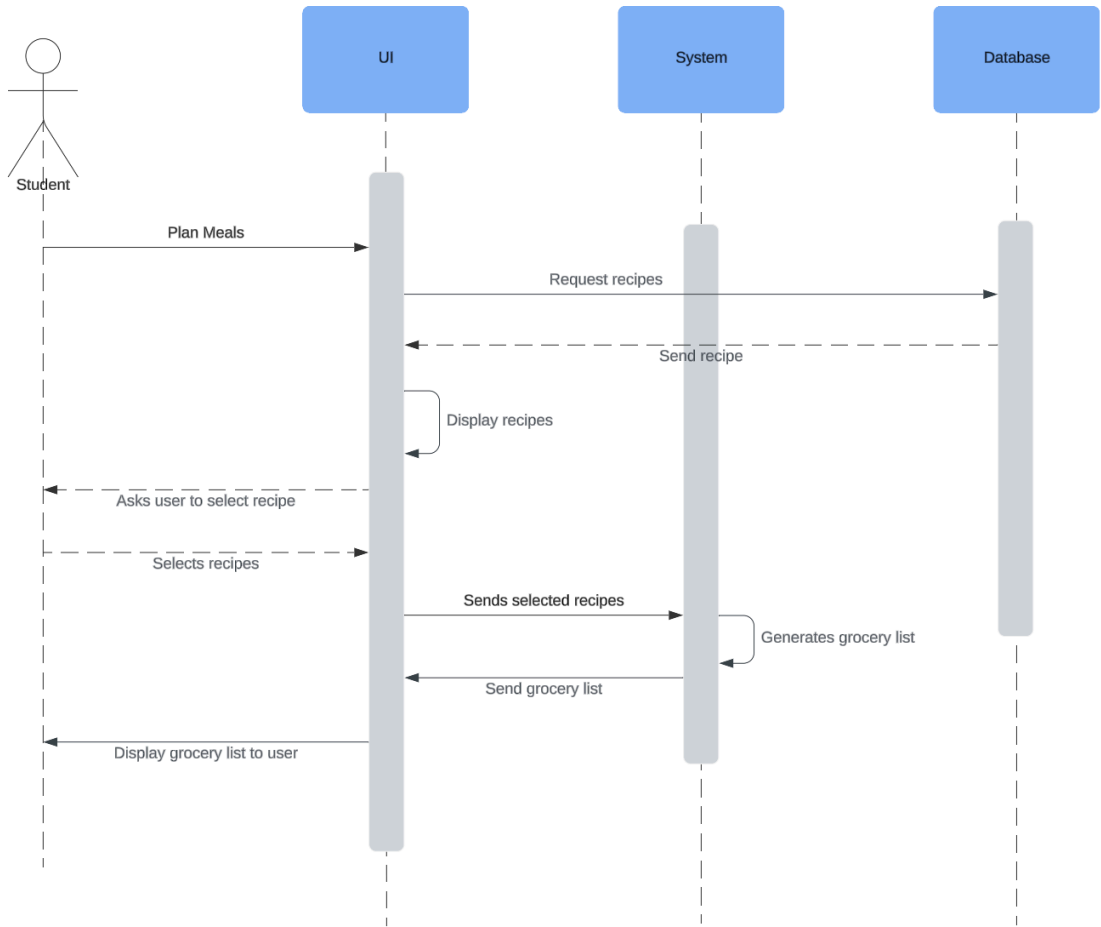
Sequence Diagram:

These diagrams break down complex interactions into detailed steps, such as how the system handles user login, recipe creation, or meal planning. For instance, the diagram for "Recipe Sequence Diagram" would map out how the student inputs recipe details, saves the recipe, and how the system stores and retrieves the data. Sequence diagrams help in visualizing these operations, ensuring the system performs as expected at each stage, from request to response.

We have used **3 sequence diagrams** to show the interactions in our project:

RECIPE SEQUENCE DIAGRAM

Student	UI	System	Database

- Create Recipie
- Asks user to enter recipe details
- User entes reipie details
- Validate recipe details
- Perform Validation
- Save Recipe
- Confirm Save
- Confirm Save
- Send success message
- Display recipe

MEAL PLANNING SEQUENCE DIAGRAM

Student

UI

System

Database

Plan Meals

Request recipes

Send recipe

Display recipes

Asks user to select recipe

Selects recipes

Sends selected recipes

Generates grocery list

Send grocery list

Display grocery list to user

GROCERY TRANSACTION SEQUENCE DIAGRAM

Student 1 (seller) — Student 2 (buyer) — UI — System — Database

- Student 1 (seller) → UI: Post item for sale
- UI → System: Send item details
- System → Database: Store item
- Student 2 (buyer) → UI: Browses groceries
- UI → Database: Fetch listings
- Database ⇢ UI: Send listings
- UI → UI: Display listings
- Student 2 (buyer) → UI: Select an item
- UI → System: Send purchase request
- System → System: Process transactiom
- System → Database: Update purchase status
- System ⇢ UI: Sends status success/failed
- UI → Student 2 (buyer): Notify Buyer
- UI → Student 1 (seller): Notify Seller